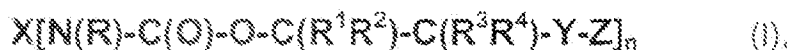


### THE CLAIMS

1. (Previously Presented) A compound which can be activated by actinic radiation, comprising at least one urethane group and having the formula I:



in which the index and the variables have the following meanings:

n is an integer from 1 to 5;

X is an at least n-valent, substituted or unsubstituted organic radical;

R is a hydrogen atom or a monovalent substituted or unsubstituted organic radical;

$R^1 - R^4$  independently of one another are a hydrogen atom, halogen atom or monovalent, substituted or unsubstituted organic radical, it being possible for at least two radicals to be cyclically linked to one another;

Y is a divalent, linking functional group containing at least one oxygen atom; and

Z is an organic radical containing at least one group which can be activated by actinic radiation;

with the proviso that at least for  $n = 1$  the radical R and/or the radical X are/is substituted by at least one substituent of the general formula II:



in which the variables Z and Y are as defined above.

2. (Previously Presented) The compound of claim 1, wherein  $n = 1$  or 2.
3. (Previously Presented) The compound of claim 1, wherein the bond which can be activated by actinic radiation in the radicals Z is a carbon-carbon double bond .
4. (Previously Presented) The compound of claim 3, wherein the radicals Z have the general formula III:



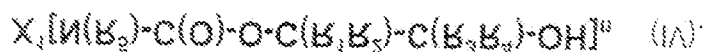
in which the variables  $R^1$ ,  $R^2$ , and  $R^3$  are as defined above and the variable -B- is a single bond between the carbon atom of the carbon-carbon double bond and the divalent linking functional group Y or is a divalent substituted or unsubstituted linking organic radical X.

5. (Previously Presented) The compound of claim 4, wherein the radicals Z are vinyl radicals.
6. (Previously Presented) The compound of claim 1, wherein the divalent linking functional groups Y are selected from the group consisting of ether, carboxylate, carbonate, phosphate, phosphonate, phosphite ester, and sulfonate groups.

7. (Previously Presented) The compound of claim 6, wherein the divalent linking functional groups Y are carboxylate groups.

8. (Previously Presented) A process for preparing compounds which can be activated by actinic radiation and have the general formula I, of claim 1, comprising reacting

- (1) at least one compound which contains at least one urethane group and has the general formula IV:



wherein the index n and the variables  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$  are as defined in claim 1 and the variable  $X^1$  is an n-valent and the variable  $R^5$  a monovalent, hydroxyl-containing or hydroxyl-free substituted with substituents of the formula II being excluded or unsubstituted, organic radical; with the proviso that at least for  $n = 1$  the radical  $X^1$  and/or radical  $R^5$  contain/contains one hydroxyl group; with

- (2) at least one compound of the formula V:



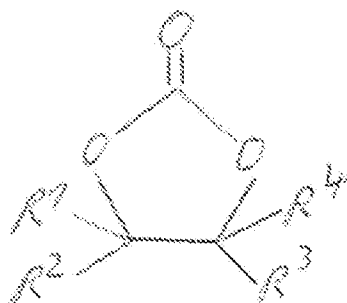
in which the variable Z is as defined in claim 1 and the variable  $Y^1$  is a reactive functional group which forms at least one group Y with the hydroxyl group or groups of the compounds of the formula IV;

in a  $Y^1 : OH$  equivalents ratio  $\geq 1.0$ .

9. (Previously Presented) The process of claim 8, wherein the reactive functional group  $Y^1$  is selected from the group consisting of halogen atoms, carboxylic acid, sulfonic acid, phosphoric acid, phosphonic acid, and phosphorous acid groups; carbonyl halide, sulfonic halide, phosphoric halide, phosphoryl halide groups; carboxylic anhydride, sulfonic anhydride, phosphoric anhydride, phosphonic anhydride, and phosphoryl anhydride groups; carboxylic, sulfonate, phosphate, phosphonate, and phosphite groups; and epoxide, N-methylol, and N-methylol ether groups.

10. (Previously Presented) The process of claim 8, wherein the compound of the formula VI is prepared by reacting

(1) at least one 1,3-dioxolan-2-one of the formula VI:



(VI),

in which the variables  $R^1$ ,  $R^2$ ,  $R^3$ , and  $R^4$  are as defined in claim 1; with

(2) at least one compound which contains at least one primary and/or secondary amino group and has the general formula VII:



in which the index and the variables  $X^1$  and  $R^5$  are as defined above,

in an amino group : carbonate group equivalents ratio = 0.8 to 1.2.

11. (Previously Presented) Compositions comprising compounds of the general formula I prepared by the process of claim 8 and curable by actinic radiation or by both thermal and actinic radiation or for preparing compositions curable by actinic radiation or by both thermal and actinic radiation.

12. (Previously Presented) Curable compositions according to claim 11 selected from the group consisting of coating materials, adhesives or sealants for producing coatings, paint systems, adhesive films, seals and moldings and self-supporting films.